IN THE CLAIMS

The status of the claims of the present application stands as follows:

1. **(Currently Amended)** An integrated circuit comprising:
   a substrate;
   a power rail;
   sea of gates; and
   a latchup control isolation network electrically coupled to said substrate and positioned in series between said power rail and said sea of gates so as to receive perturbations in voltage potential in said substrate arising from latchup events in said substrate, said latchup control isolation network adapted to electrically isolate said sea of gates from said power rail in response to ~~latchup events on said substrate~~undesirable perturbations in said voltage potential in said substrate.

2. **(Currently Amended)** An integrated circuit according to claim 1, wherein said substrate has a first polarity, the circuit further including a well having a second polarity, further wherein said latchup control isolation network is also ~~electronically~~ electrically coupled to said well and is positioned in series between said power rail and said sea of gates so as to receive perturbations in voltage potential in said well arising from latchup events in said well, said latchup control isolation network adapted to electrically isolate said sea of gates from said power rail in response to ~~latchup events on~~ undesirable perturbations in said voltage potential in at least one of said substrate and said well.

3. **(Currently Amended)** An integrated circuit according to claim 2, ~~wherein said substrate has a voltage potential, further~~ wherein said latchup control isolation network ~~is turned~~ turns off thereby isolating said sea of gates from said power rail when ~~either~~ said voltage potential in one or both of said substrate and said well equals or is greater than a first predetermined value or said voltage potential equals or is less than a second predetermined value.

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4. **(Previously Amended)** An integrated circuit according to claim 1, further including a well, wherein said power rail includes a VDD power rail and a VSS power rail and said latchup control isolation network includes a first FET with a first polarity type channel in said well and connected to said VDD rail and a second FET with a second polarity type channel connected to said VSS rail and said substrate.

5. **(Previously Amended)** An integrated circuit according to claim 4, wherein said first FET is a p-channel MOSFET and said second FET is a n-channel MOSFET.

6. **(Original)** An integrated circuit according to claim 1, wherein said latchup control isolation network includes an inverter circuit.

7. **(Currently Amended)** An integrated circuit comprising:
a substrate;
a power rail;
a sea of gates; and
an active clamp network electrically coupled to said substrate and positioned in serics between said power rail and said sea of gates so as to receive perturbations in voltage potential in said substrate arising from latchup events in said substrate, said active clamp network adapted to electrically isolate said sea of gates from said power rail in response to ~~latchup events~~ undesirable perturbations in said voltage potential on said substrate.

8. **(Currently Amended)** An integrated circuit according to claim ~~5~~7, wherein said substrate has a first polarity, the circuit further including a well having a second polarity, further wherein said latchup control isolation network is also ~~electronically~~ electrically coupled to said well and is positioned in series between said power rail and said sea of gates so as to receive perturbations in voltage potential in said well arising from latchup events in said well, said latchup control isolation network adapted to electrically isolate said sea of gates from said power rail in response to ~~latchup events~~ undesirable perturbations in said voltage potential on at least one of said substrate and said well.

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9. **(Currently amended)** An integrated circuit according to claim 8, wherein ~~said substrate has a voltage potential, further wherein~~ said active clamp network ~~is turned~~ turns off thereby isolating said sea of gates from said power rail when ~~either~~ said voltage potential in one or both of said substrate and said well equals or is greater than a first predetermined value or said voltage potential equals or is less than a second predetermined value.

10. **(Original)** An integrated circuit according to claim 9, wherein said first predetermined value is V_{DD}.

11. **(Original)** An integrated circuit according to claim 9, wherein said second predetermined value is V_{SS}.

12. **(Currently Amended)** A method of suppressing latchup in an integrated circuit in a substrate, said circuit having a sea of gates and a power rail, comprising the steps of:

electrically connecting one of a latchup control isolation network and an active clamp network to the substrate in series between the sea of gates and the power rail and to receive changes in voltage potential in the substrate arising from latchup events on the substrate; and

turning off said latchup control isolation network, when connected in said prior step, or turning on said active clamp network, when connected in said prior step, thereby isolating the power rail from the sea of gates in response to latchup events on said substrate.

13. **(Currently Amended)** A method according to claim 12, further comprising the steps of: providing a substrate having a first polarity, the circuit further including a well having a second polarity, further wherein said latchup control isolation network is also ~~electronically~~ electrically coupled to said well and is positioned in series between the power rail and the sea of gates so as to receive changes in voltage potential in said well arising from latchup events in said well, said latchup control isolation network adapted to electrically isolate said sea of gates from said power rail in response to latchup events on at least one of said substrate and said well.

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14. **(Original)** A method according to claim 13, wherein if said latchup control isolation network is connected in said electrically connecting step, said latchup control isolation network is turned off thereby isolating said sea of gates from said power rail when either said voltage potential equals or is greater than a first predetermined value or said voltage potential equals or is less than a second predetermined value.

15. **(Original)** A method according to claim 14, wherein said first predetermined value is $V_{DD}+V_{bc}$.

16. **(Original)** A method according to claim 14, wherein said second predetermined value is $V_{SS}-V_{be}$.

17. **(Original)** A method according to claim 13, wherein if said latchup control isolation network is connected in said electrically connecting step, said active clamp network is turned off thereby isolating said sea of gates from said power rail when either said voltage potential equals or is greater than a first predetermined value or said voltage potential equals or is less than a second predetermined value.

18. **(Original)** A method according to claim 17, wherein said first predetermined value is V_{DD}.

19. **(Original)** A method according to claim 17, wherein said second predetermined value is V_{SS}.

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